

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	12D-01-20M 230A-01-20M	1990	4	14

GENERAL NOTES

- Improvements consists of resurfacing the existing pavement, reconstructing approaches to one tank crossing, adjusting water valve boxes and utility handholes and installing and replacing pavement markers.
- Tack coat shall be incidental to item no. 401.0500- Asphalt Concrete Pavement, Mix No. V.
- Asphalt concrete for leveling shall be paid for under item no. 401.0500- Asphalt Concrete Pavement, Mix No. V.
- All construction signs shall be reflectorized with high intensity reflective sheeting.
- Existing pavement surface variable. Surface indicated on Typical Sections is not intended to represent any specific location.
- Smooth and easy riding connections shall be constructed at the beginning and ending of project and at the ending of daily work.
- All lanes shall be opened to traffic during morning peak hours from 6:00 a.m. to 8:00 a.m. and during the afternoon peak hours from 3:30 p.m. to 5:00 p.m. and during off-work hours or as directed by the Engineer. Only one lane of the highway shall be closed at any other time.
- Initial preparation of shoulder areas shall be done by the State. Contractor shall be responsible for finish rolling and maintaining the shoulders thereafter. Contractor's attention is called to Section 104.10, Maintenance of shoulders.
- Pavement areas to be striped shall be broomed off by the contractor prior to striping by the State.
- The Contractor's attention is directed to the Pavement Marker Schedule on Sheet No. 8. The Type DL and HL pavement markers in the Exception areas shall be replaced with new as shown on the Schedule.

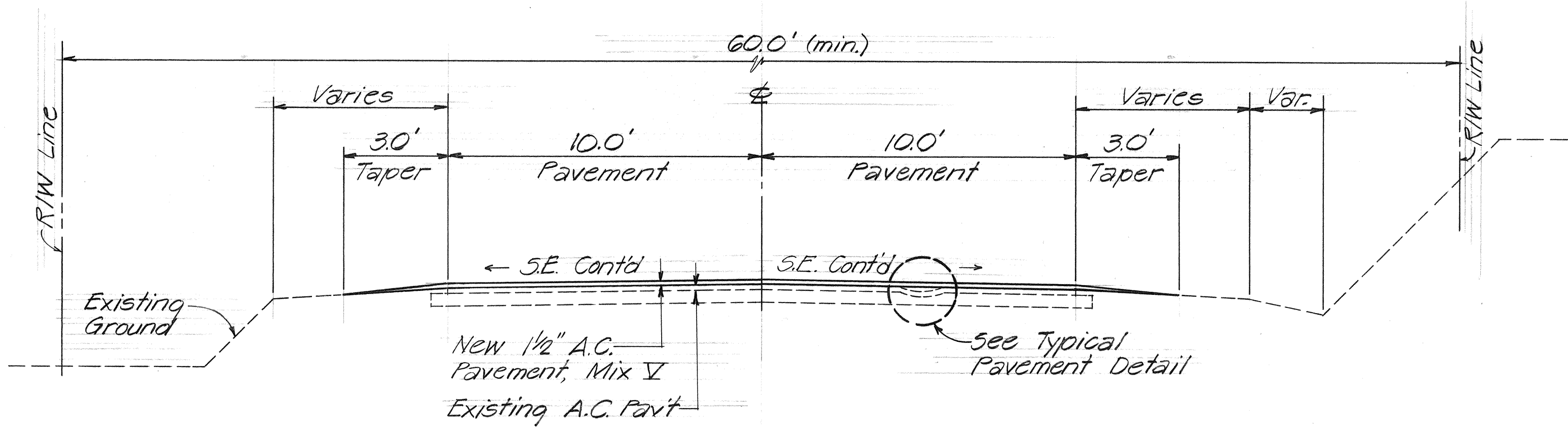
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS
AND DETAILS

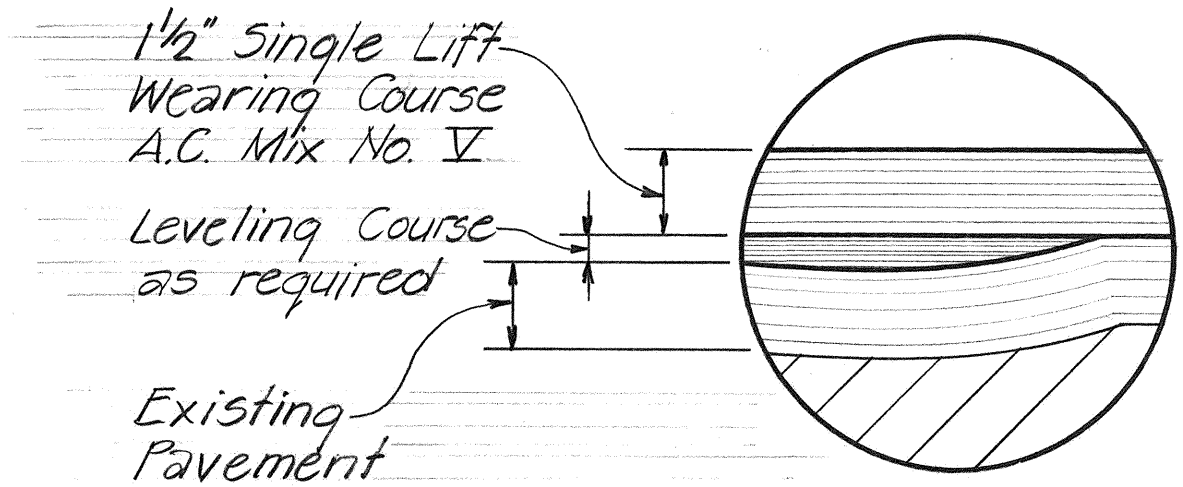
KAWAIIHAE ROAD RESURFACING
Queen Kaahumanu Hwy. Towards Waimea
Proj. no. 12D-01-20M

Not to Scale
Date: Sept. 1989

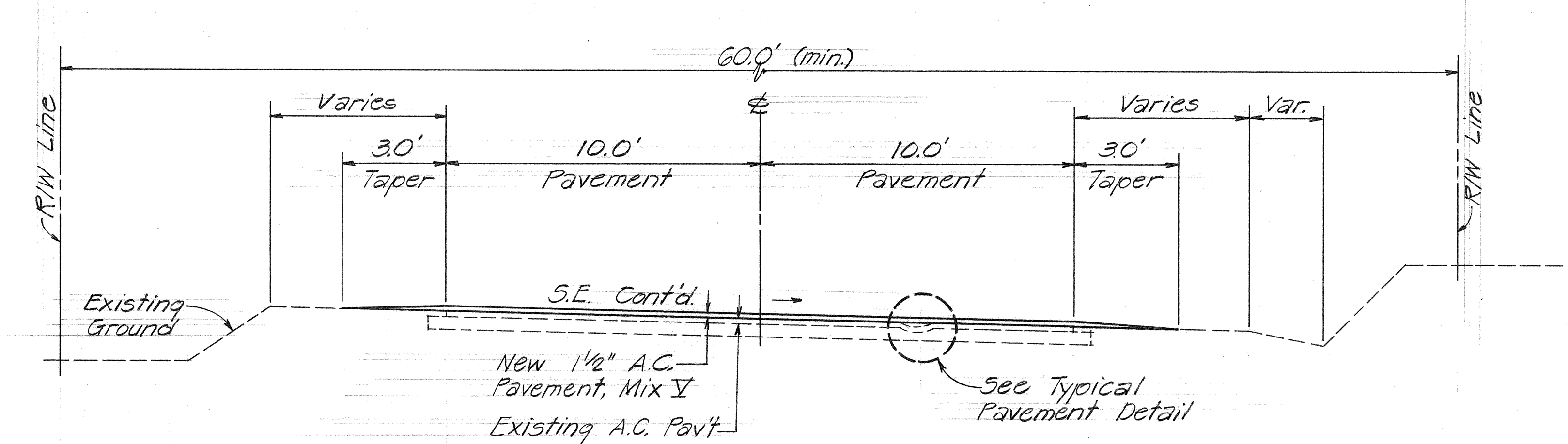
SHEET No. 1 OF 5 SHEETS



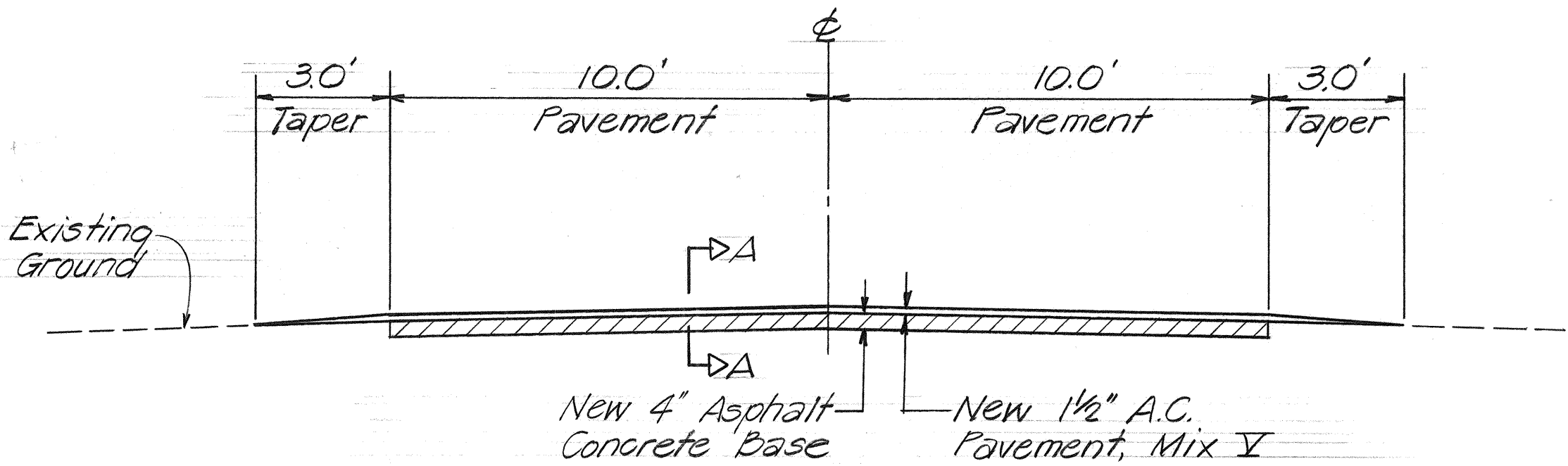
TYPICAL TANGENT SECTION
Not to Scale



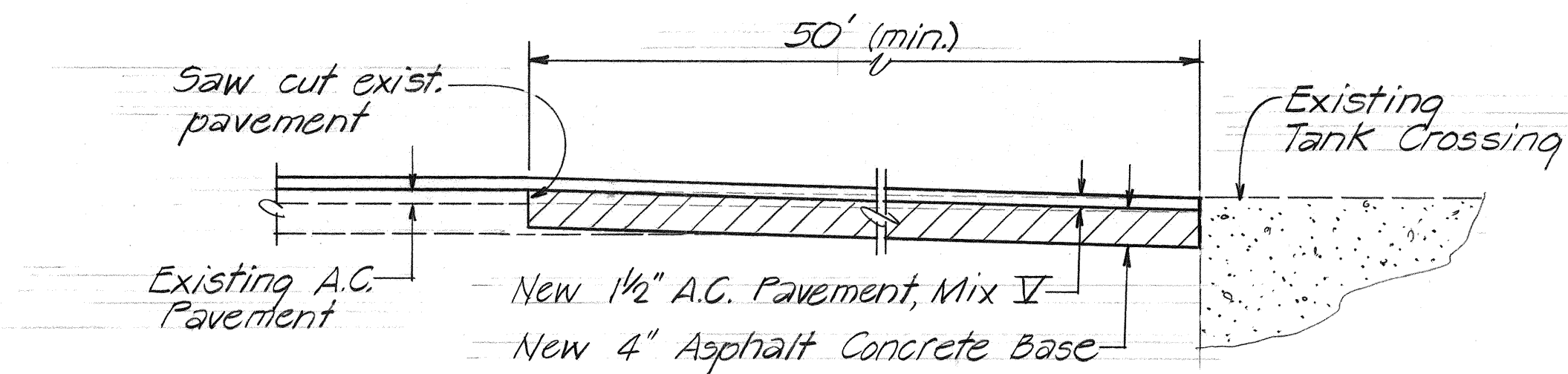
TYP. PAVEMENT DETAIL
Not to Scale



TYPICAL SUPERELEVATED SECTION
Not to Scale

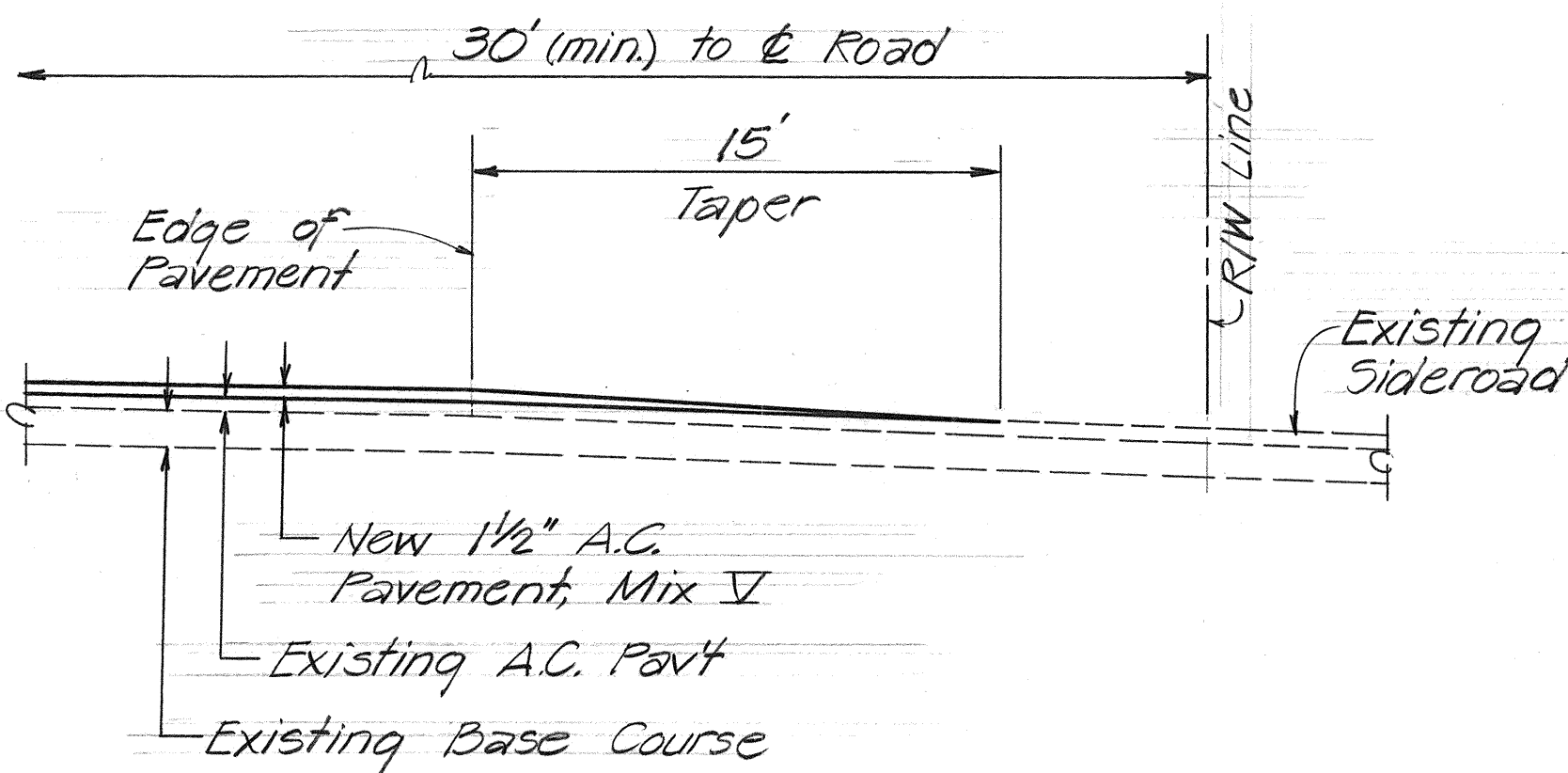


TYPICAL SECTION



SECTION "A-A"

TANK APPROACH PAVEMENT RECONSTRUCTION DETAILS
Not to Scale

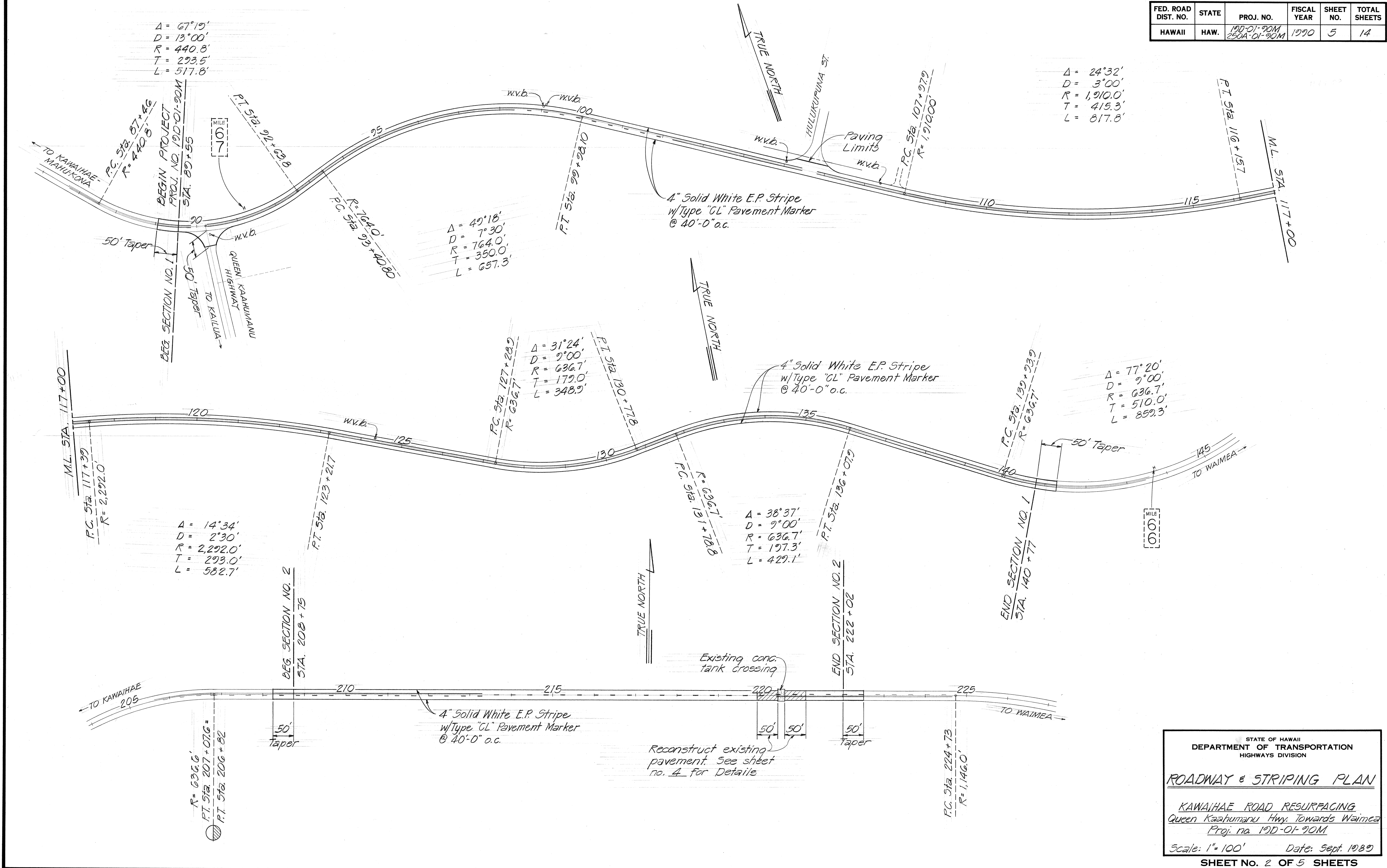


SIDEROAD CONNECTION DETAIL
Not to Scale

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190-01-90M 250A-01-90M	1990	5	14

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NO.	DRAWN BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY & STRIPING PLAN

KAWAIHAE ROAD RESURFACING
Queen Kaahumanu Hwy. Towards Waimea
Proj. no. 190-01-90M

Scale: 1"=100' Date: Sept. 1989

SHEET NO. 2 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190-01-90M 250A-01-90M	1990	6	14

$\Delta = 8^{\circ}35'$
 $D = 1^{\circ}00'$
 $R = 5,730.0$
 $T = 433.3$
 $L = 865.0$

End Proj. no. F.A.P. 11B
 Sta. 285+00
 Begin Proj. no. NRH 11C

P.C. Sta. 282+38.70
 R=5730.0

P.C. Sta. 292+82.7
 R=1,146.0

P.C. Sta. 325+27.8
 R=5730.0

$\Delta = 6^{\circ}45'$
 $D = 3^{\circ}00'$
 $R = 1,910.0$
 $T = 112.9$
 $L = 225.0$

P.T. Sta. 352+10.00 A.H.
 P.T. Sta. 352+20.00 B.K.

P.C. Sta. 349+85.00
 R=1,910.0

$\Delta = 32^{\circ}50'$
 $D = 5^{\circ}11'$
 $R = 1,146.0$
 $T = 337.7$
 $L = 656.7$

P.T. Sta. 299+39.4

BEGIN SECTION NO. 4
 STA. 347+95

R=2865.0
 P.T. Sta. 347+65.8

C.C.O. No. 2:
 Sta. 356+60 to 371+30:
 Revised Pavement Striping
 (See Schedule on Sht. No. 8)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

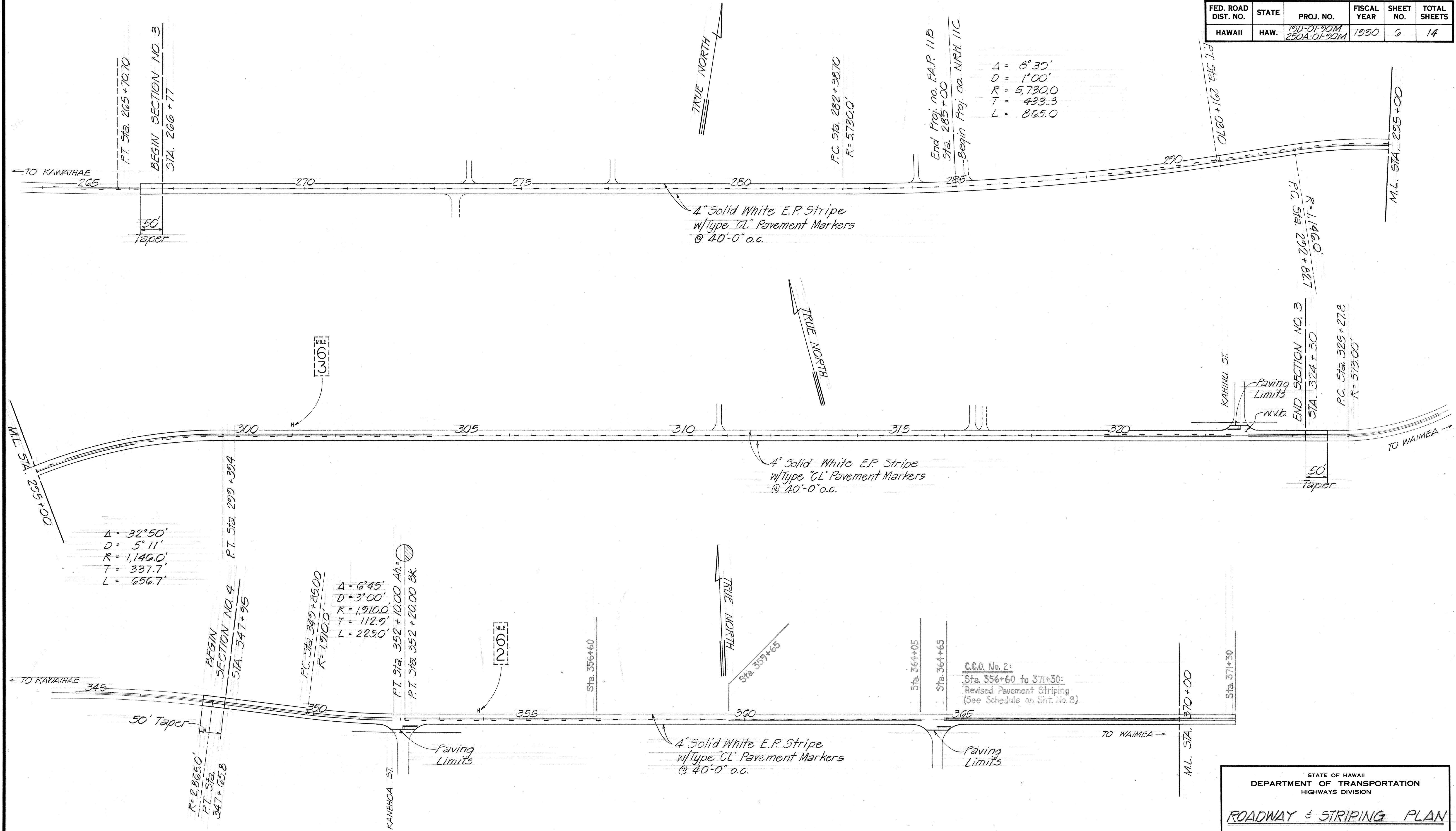
ROADWAY & STRIPING PLAN

 KAWAIHAE ROAD RESURFACING
 Queen Kaahumanu Hwy. Towards Waimea
 Proj. no. 190-01-90M
 Scale: 1"=100' Date: Sept. 1989

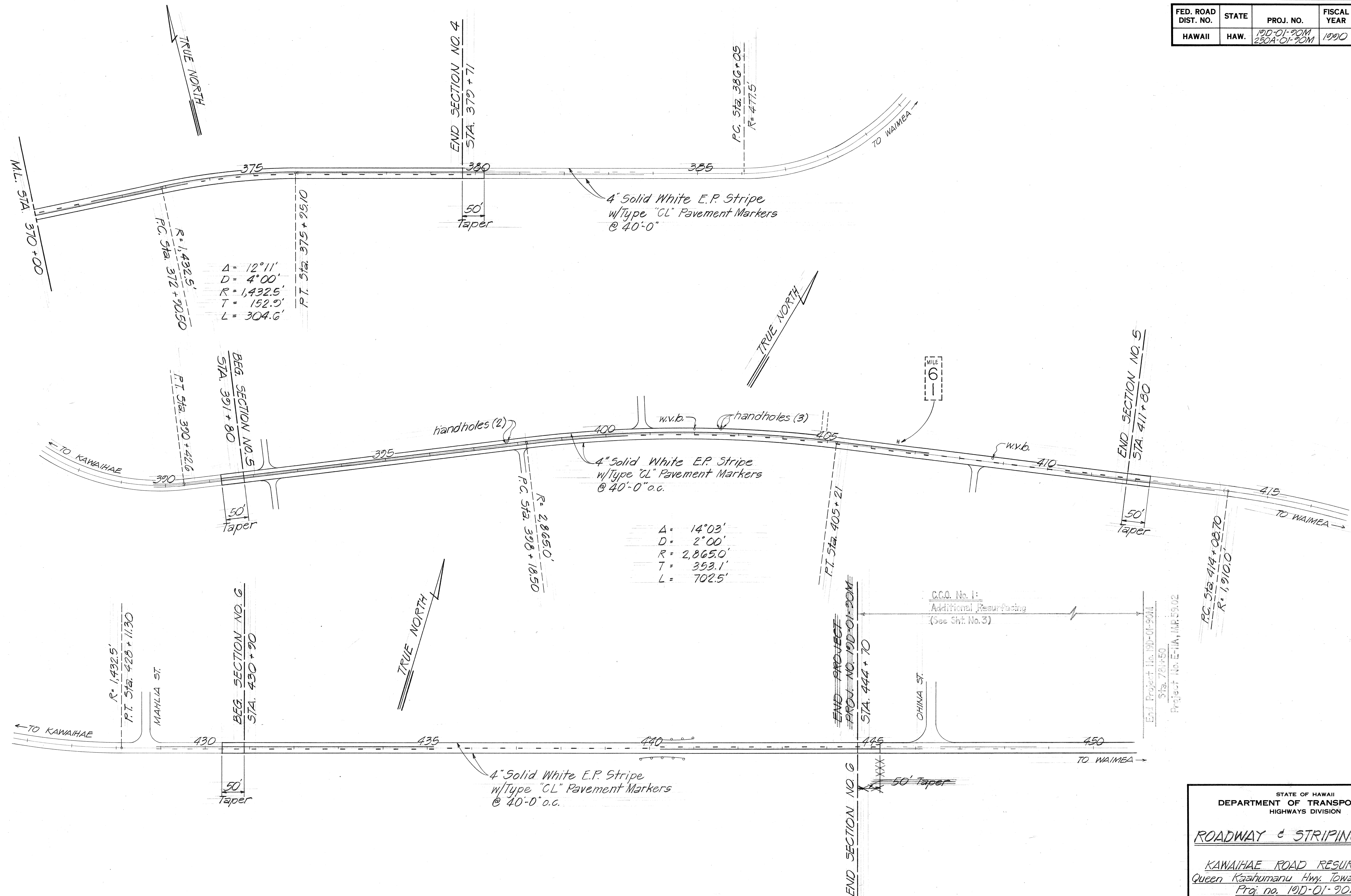
SHEET No. 3 OF 5 SHEETS

AS-BUILT

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	19D-01-20M 250A-01-20M	1990	7	14



AS-BUILT

7

③ KAWAII

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
NOTE BOOK	DRAWN BY _____	" _____
	DESIGNED BY _____	" _____
	QUANTITIES BY _____	" _____
	CHECKED BY _____	" _____
No. _____		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY & STRIPING PLAN

KAWAIHAE ROAD RESURFACING
Queen Kaahumanu Hwy. Towards Waimea
Proj. no. 19D-01-90M

Scale: 1" = 100' Date: Sept. 1989

SHEET NO. 4 OF 5 SHEETS

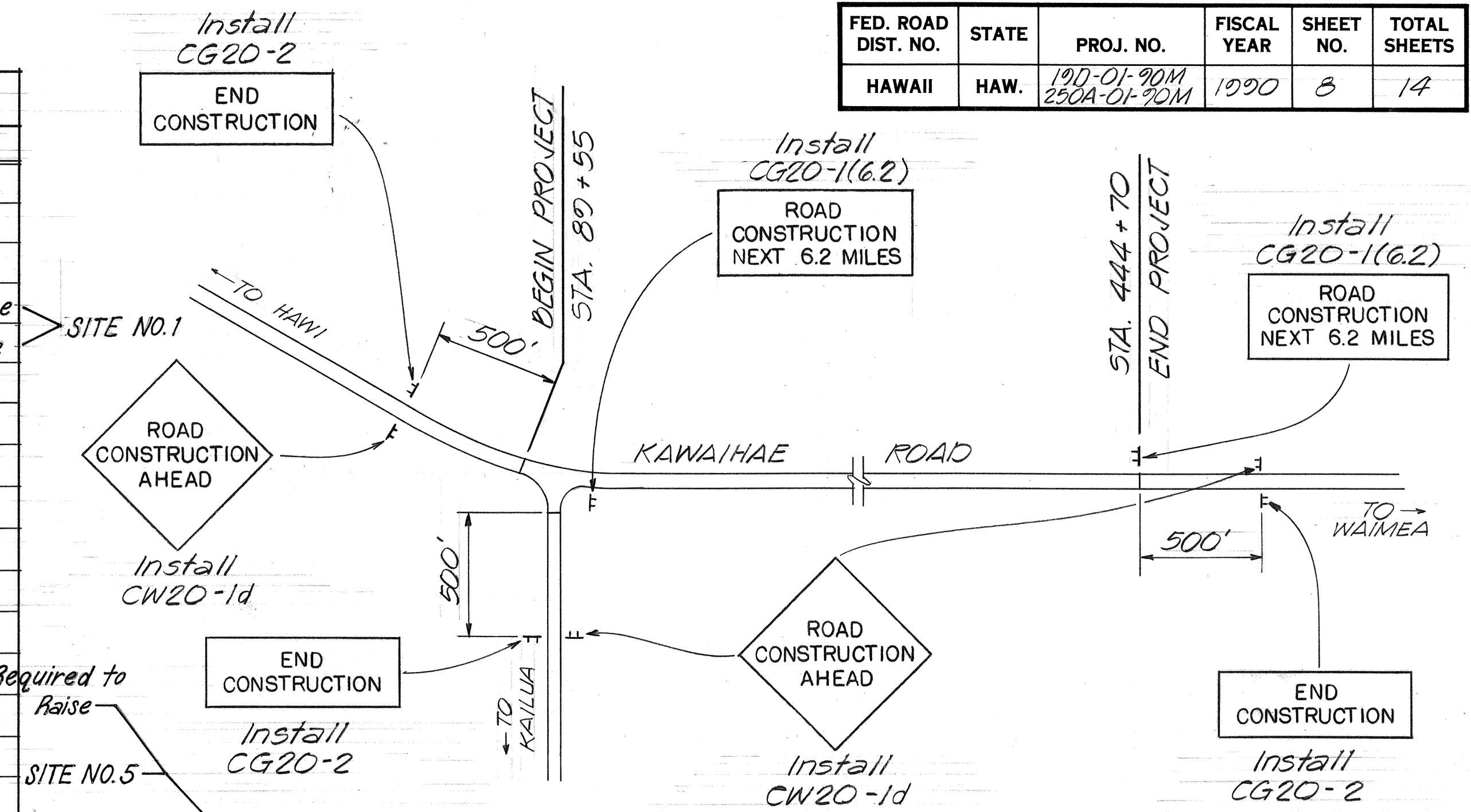
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	19D-01-90M 250A-01-90M	1990	8	14

PAVEMENT MARKER SCHEDULE

STATION		DESCRIPTION	TYPE					
FROM	TO		DL	HL	J	DL*	HL*	GL
89 + 05	89 + 79	No Passing - Both Sides	5					6
89 + 79	90 + 20	Open (Queen Kaahumanu Hwy)						4
90 + 20	98 + 25	No Passing - Both Sides	41					40
98 + 25	102 + 39	No Passing L - Passing R	11	10	40			20
102 + 39	105 + 44	No Passing - Both Sides	16					16
105 + 44	105 + 84	Open (Hulukupuna St.)						2
105 + 84	141 + 27	No Passing - Both Sides	178					178
141 + 27	208 + 25	Exception (Markers Only)				329	7	336
208 + 25	213 + 30	No Passing L - Passing R	13	13	52			26
213 + 30	220 + 30	Passing - Both Sides	18		68			36
220 + 30	222 + 52	Passing L - No Passing R	6	6	24			12
222 + 52	266 + 27	Exception (Markers Only)				188	34	218
266 + 27	288 + 65	Passing - Both Sides	57		224			112
288 + 65	295 + 65	Passing L - No Passing R	18	18	72			36
295 + 65	297 + 25	No Passing - Both Sides	9					8
297 + 25	304 + 25	No Passing L - Passing R	18	18	72			36
304 + 25	319 + 90	Passing - Both Sides	40		156			78
319 + 90	322 + 60	Passing L - No Passing R	7	8	32			14
322 + 60	323 + 00	Open (Kahinu St.)						2
323 + 00	324 + 80	No Passing - Both Sides	10					10
324 + 80	347 + 45	Exception (Markers Only)				114		114
347 + 45	351 + 80	No Passing - Both Sides	23					22
351 + 80	352 + 10 BK 352 + 20 AH	Open (Kanehoa St.)	3					2
352 + 20	356 + 60	No Passing L - Passing R	12	12	48			22
356 + 60	364 + 5	Passing - Both Sides	20		76			38
364 + 65	371 + 30	Passing L - No Passing R	17	17	68			34
371 + 30	373 + 50	No Passing - Both Sides	12					12
373 + 50	380 + 21	No Passing L - Passing R	18	17	68			34
380 + 21	391 + 30	Exception (Markers Only)				56		56
391 + 30	400 + 50	No Passing - Both Sides	47					46
400 + 50	407 + 50	No Passing L - Passing R	18	18	72			36
407 + 50	410 + 25	Passing - Both Sides	7		28			16
410 + 25	412 + 20	Passing L - No Passing R	5	5	20			10
412 + 20	430 + 40	Exception (Markers Only)				76	15	92
430 + 40	435 + 16	No Passing L - Passing R	12	12	48			24
435 + 16	440 + 25	Passing - Both Sides	13		48			26
440 + 25	445 + 20	Passing L - No Passing R	13	13	52			24
364 + 25	364 + 65	Open (Kanehoa St.)						2
TOTALS			667	467	1,268	763	56	1,800
			678	162	1,200			1,790

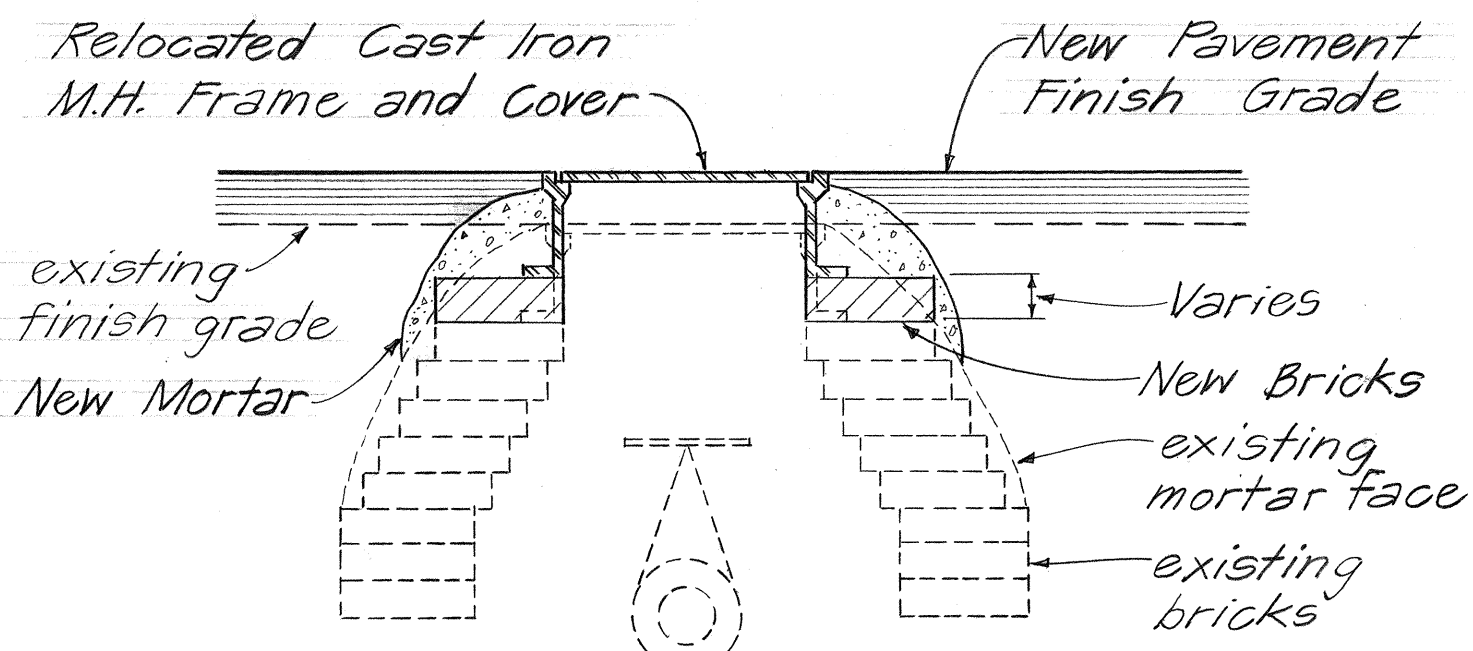
VALVE BOX/HANDHOLE SCHEDULE

STATION	OFFSET (FT.)	DESCRIPTION
90 + 30	22.8 RT.	W.V.B. (12'x15')
99 + 02	10.5-9.4 LT.	"
99 + 05	14.0-13 LT.	" Not Required to Raise
105 + 01	17.8-8.4 LT.	" Not Required to Raise
107 + 35	10.8 LT.	"
124 + 32	7.6 LT.	"
322 + 23	10.6 LT.	W.V.B. (12'x15')
397 + 76	5 LT.	Handhole (10'dia)
397 + 78	8 LT.	"
401 + 99	8 LT.	W.V.B. (12'x15') Not Required to Raise
402 + 57	12 LT.	Handhole (10'dia)
402 + 59	9.5 LT.	"
402 + 62	12 LT.	"
408 + 75	8 LT.	W.V.B. (12'x15') Not Required to Raise
TOTAL		14 - EA.



CONSTRUCTION SIGN PLAN
Not to Scale

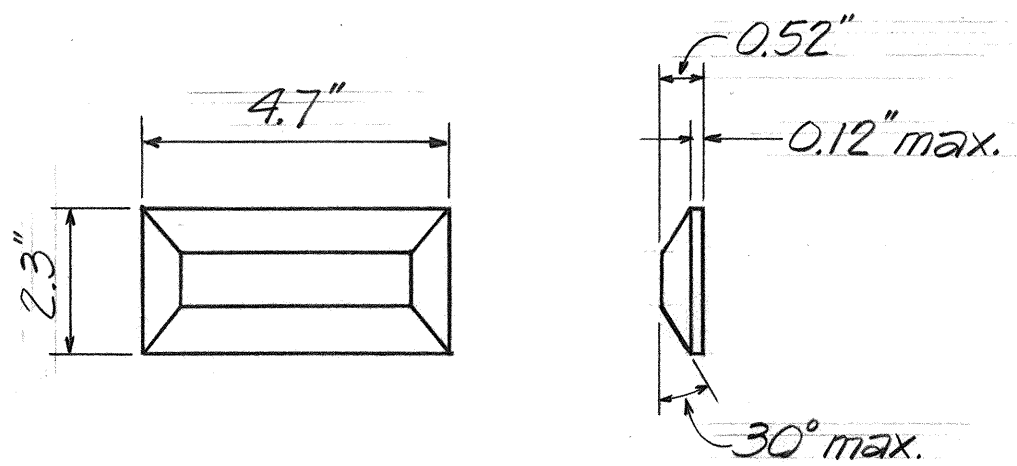
EXISTING PROJ. NO.	STATION	TYPE (Item no. 621.7120)
11-B	84 + 55 RT.	CW20-1d
	84 + 55 LT.	CG20-2
	90 + 80 RT.	CG20-1(6.2)
G-3257-01-60 (Queen K. Hwy.)	11 + 00 RT.	CG20-2
	11 + 00 LT.	CW20-1d
11-C	444 + 70 LT.	CG20-1(6.2)
	449 + 70 RT.	CG20-2
	449 + 70 LT.	CW20-1d
TOTAL		8 - Ea.



C.I. VALVE BOX
FRAME & COVER DETAIL
Not to Scale

- NOTES:
- Layout of pavement markers shall be done by the Contractor and approved by the Engineer prior to any installation work.
 - Pavement areas to be striped shall be broomed of by the Contractor prior to striping by the State.
 - Details of Type C, Type D and Type H Markers on Standard Plan Nos. TE-30, TE-31 and TE-32 shall be deleted and replaced with details of Type GL, Type DL and Type HL Markers as shown on this sheet. All references to Type C, Type D and Type H Markers in the plans shall mean Type GL, Type DL and Type HL Markers.
 - Final locations of all signs shall be approved by the Engineer prior to any installation work.

Type "GL": Red-Clear Reflective Marker
Type "DL": Two-Way Yellow Reflective Marker
Type "HL": One-Way Yellow Reflective Marker



"L" SERIES
PAVEMENT MARKER DETAIL
Not to Scale

* - Item no. 629.2050 and 629.2070, work involves removing the existing "DL" and "HL" pavement markers and replace with new pavement markers.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**CONSTRUCTION SIGN PLAN,
DETAILS & SCHEDULES**

KAWAIHAE ROAD RESURFACING
Queen Kaahumanu Hwy. Towards Waimea
Proj. no. 19D-01-90M

Not to Scale Date: Sept. 1989

SHEET No. 5 OF 5 SHEETS